REMARKS

Claims 1-104 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein. Additionally, Applicants would like to thank the Examiner for courtesy extended during the telephone conversation held on March 6, 2007.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-104 are rejected under 35 U.S.C. § 102(b) as being anticipated by Burnstein (U.S. Pat. No. 6,268,716).

Claims 1-104 are rejected under 35 U.S.C. § 102(b) as being anticipated by Varga (U.S. Pat. No. 6,144,194). These rejections are respectfully traversed.

With respect to Claim 1, neither Burnstein nor Varga show, teach or suggest a digital controller that is adapted to selectively set the phase interval to one of greater than 360/N or less than 360/N when N is defined as the quantity of output phases.

For anticipation to be present under 35 U.S.C §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. *Scripps Clinic & Res. Found. V. Genentech, Inc.*, 18 USPQ.2d 1001 (Fed. Cir. 1991).

As best understood by Applicants, both Burnstein and Varga set a phase interval dependant on the number of output phases divided by 360 degrees. In Varga:

> (T)he present invention more generally involves **connecting N regulator stages,** with each stage synchronized to a clock (for current-mode implementations) or sawtooth waveform (for voltage-mode embodiments) that is **360.degree./N out of phase from the adjacent stage.**

Column 7, Lines 58-64 (emphasis added). In other words, the phase interval for N output phases is 360/N.

Likewise in Burnstein:

> In step 122, for each non-reference slave, the control algorithm calculates a desired phase offset .PHI.(i) representing the desired time delay in the onset of the PMOS and NMOS conduction states between the reference and non-reference slaves. For example, *if two slaves are active, then they should be 180.degree. out of phase,* and the time delay should be equal to one-half of the switching period T, i.e., .PHI.(1)=1/2T. *If three slaves are active, then they should be 120.degree. C. out of phase,* and the time delays .PHI.(1), .PHI.(2) should be equal to one-third and two-thirds of the switching period, respectively. By operating the slaves out of phase, the current ripples from each slave will at least partially cancel, thereby providing a more constant output current from the switching regulator. The desired phase offsets are summarized by Table 3.

Column 15, Lines 33-47 (emphasis added). According to Burnstein, the slaves correspond to output phases. Thus, in Burnstein, the phase interval is merely disclosed to be 360/2=180 or 360/3=120 respectively for 2 or 3 output phases. More generally, if N slaves of Burnstein are active, where N=2 or N=3, the phase interval of Burnstein may be represented by 360/N.

As best understood by Applicants, it is not disclosed, taught, or even suggested that the phase intervals of either Varga or Burnstein may be set to greater than or less than 360/N where N is specifically defined to be the quantity of output phases, as in Claim 1. For example, Paragraphs [0026] and [0028] and FIGs. 4A-4C of the Application illustrate two output phases having a duty cycle of 33% and a phase interval of about 150 degrees. In other words, the phase interval is set to less than 360/N for N output phases. For the present example, Burnstein and Varga would automatically use

50% duty cycle and 360/2=180 degrees for the phase interval, which corresponds to 360/N for N output phases.

Referring to the amended portion of previously presented Claim 1, the Examiner commented that: "Given N to any normal counting number. The phase interval is always going to be between 0 and 360. This limitation does not further define or limit the phase interval." However, this statement appears to ignore the fact that the claimed phase interval of Claim 1 is dependent on the quantity N of output phases. Therefore the phase interval is not merely any number between 0 and 360 but a number dependent on the quantity of output phases. Burnstein and Varga *always* set the phase interval to 360/N where N is the quantity of output phases. The controller of Claim 1 sets the phase interval to greater than or less than 360/N for the quantity N of output phases.

Therefore, Claim 1 is allowable for at least the reason that the claim and the prior art differ. Claims 9, 22, 30, 43, 51, 62, 68, 76, 82, 90, and 96 are allowable for at least similar reasons as Claim 1. Claims 2-8, 10-21, 23-29, 31-42, 44-50, 52-61, 63-67, 69-75, 77-81, 83-89, 91-95, and 97-104 ultimately depend from Claims 1, 9, 22, 30, 43, 51, 62, 68, 76, 82, 90, and 96 and are allowable for at least similar reasons.
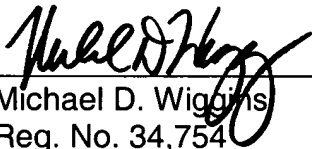
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: <u>March 12, 2007</u>　　　　　　By: _____

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